

Barriers to cervical cancer screening among immigrants

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ABSTRACT

For women ages 21 to 65 years who have not had a hysterectomy, the US Preventive Services Task Force (USPSTF) recommends cervical cancer screening with cytology (Pap smear) every 3 years or a combination of cytology and human papillomavirus (HPV) testing every 5 years. However, foreign-born women were less likely to have received a Pap smear compared with US-born women. This article reviews barriers to cervical cancer screening for foreign-born women.

Keywords: cervical cancer, Pap smear, immigrants, preventive medicine, women, screening

Learning objectives

- Describe cervical cancer screening recommendations.
- Describe US and worldwide rates of cervical cancer.
- Review barriers to cervical cancer based on demographics.
- Review possible interventions to improve cervical cancer screening rates among foreign-born women and US-born women.

About 1 in 10 residents in the United States were born abroad, and about 21% of the population (61 million people) speak a language other than English.¹ Of these, 7% speak no English and even more have low English proficiency.¹ Low English proficiency has been found to lead to poor health, low quality of healthcare, reduced understanding of medical information, and dissatisfaction with healthcare.² Immigrants have been found to have lower screening rates than native-born citizens in cervical, breast, and colorectal cancers.^{3,4}

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DOI:10.1097/01.JAA.0000819564.35151.0a

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These patients face many barriers to preventive screening. A lack of healthcare insurance, as well as language and cultural barriers, can lead to poor patient-clinician communication and fewer conversations about the importance of screening.³ In addition, because of religious and cultural beliefs, many immigrant women have difficulty presenting or even discussing their gynecologic concerns, especially with a male clinician.⁵ Patients with limited English proficiency receive preventive care less often than patients of similar ethnicity who speak English.⁶ Rates of screening in immigrants are comparable to underserved nonimmigrants in the United States.⁵ Studies have found that immigrants are more likely to present at more advanced stages of the disease, which inevitably leads to poorer survival and increased cost.³

This article reviews barriers to cervical cancer screening among immigrant women and how clinicians can improve screening rates.

CERVICAL CANCER SCREENING

The Pap smear, introduced in the United States in the 1950s, was named after its inventor, George Nicholas Papanicolaou,

Key points

- Cervical cancer remains the second most common cancer in women.
- Foreign-born women are twice as likely to have never received a Pap test compared with women born in the United States.
- Clinicians must understand the issues unique to each region in order to increase cervical cancer screening rates in patients.
- Educational programs have been found to be beneficial in a number of cultures.

MD, who studied the cytologic characteristics of the vagina and cervix.^{7,8} Three types of tests are available for cervical cancer screening: conventional (Pap) and liquid-based cytology, visual inspection with acetic acid, and human papillomavirus (HPV) testing for patients at risk for HPV.⁹

According to the CDC, since the introduction of the Pap smear in the United States, deaths from cervical cancer have decreased 74%.⁷ In the United States and other high-income countries, Pap smears have been an effective screening tool.⁹ However, cervical cancer remains the second most common cancer in women, accounting for 3.3% of all cancers diagnosed in 2020.⁹ The annual economic cost of cancer was estimated at \$1.16 trillion in 2010, a significant incentive for improving preventive screenings.¹⁰ In one study, more than half of new cervical cancer cases were in women who were rarely or never screened, and a study in New Mexico found that 64% of women with cervical cancer had not been screened.^{11,12}

Who should be screened? The US Preventive Services Task Force (USPSTF) recommends that women ages 21 to 65 years who have not had a hysterectomy be screened with cytology (Pap smear) every 3 years.¹³ Alternatively, women ages 30 to 65 years may lengthen screening intervals with a combination of cytology and HPV testing every 5 years.¹³ Pap smear screening is recommended for all women with a cervix, regardless of sexual history.¹⁰ Increased screening recommendations are in place for women who are immunocompromised or who have had a high-grade precancerous cervical lesion, cervical cancer, or *in utero* exposure to diethylstilbestrol.¹⁰

Healthy People 2030, a 10-year national initiative by the Community Preventive Services Task Force, aims for 84.3% of women to be screened for cervical cancer annually and to increase screening rates by a percentage point from baseline by 2030.¹⁴ Baseline rates in 2018 showed that 80.5% of women received a cervical cancer screening based on the USPSTF recommendation.¹⁴

How to increase screening Healthy People 2030 specified that to increase cervical cancer screening, multicomponent interventions are needed, including patient reminders, clinician reminders, recall systems, clinician assessment

and feedback, small media targeting patients (such as videos, letters, brochures, and newsletters), community healthcare workers, one-on-one patient education, and screening intervention programs.¹⁴

To reduce the incidence of cervical cancer, the CDC recommends that clinicians work to improve cervical cancer screening in women who have never been screened or who are screened infrequently and increase rates of HPV vaccination in eligible patients.⁷ HPV is a common infection that can be acquired after a patient becomes sexually active, so proper education before this time is key to preventing infection.⁹ Most cases of invasive cervical cancers could have been prevented with routine screening and appropriate abnormal Pap smear follow-up.¹⁵ When cancer is identified early, patients are more likely to respond to treatment, survival rates improve, morbidity decreases, and treatments can be more cost-effective.¹⁰

Risk factors for cervical cancer include lack of or infrequent screening, HPV persistence, immunosuppression, history of lower genital tract neoplasia, increased number of lifetime sexual partners, early age of sexual activity, infection with *C. trachomatis*, possibly herpes simplex virus (HSV), tobacco use, long-term use of oral contraceptives, and more than three full-term pregnancies.¹⁵

IMMIGRANTS

Additional factors thought to reduce screening rates in immigrants are their poor English proficiency and a lack of resources in the patient's language. Other factors include patient's undocumented legal status; low socioeconomic status; fear; embarrassment; lack of knowledge about cancer and screening; only seeking care when ill; low prioritization of healthcare; lack of time or inability to take time away from work; healthcare provider sex, race, or ethnicity; short appointment times (more time spent with patients is correlated to increased screening rates); complex scheduling systems; lack of transportation or parking; reliance on traditional medicine and rituals instead of seeking healthcare; how frequently cancer screening is offered; life demands (putting children's needs before one's health); and patient responses to screening recommendations.^{2,16} Immigrants may be ambivalent about seeking care when they feel healthy and asymptomatic.⁹ Issues such as poverty, unemployment, and difficulties with finding housing and food may reduce the importance of preventive screening recommendations.⁴ Interventions thought to be beneficial for immigrants include improving interpreter services, increasing appointment length, reducing geographic barriers (distance, accessibility of public transportation, mobile screening), facilitated access to screening, targeting healthcare providers to educate their immigrant patients about the benefits of cancer screening, educational material in multiple languages (visual aids, videos, hands-on education), family members or community members dis-

cussing or accepting screening, use of community workers, and repeatedly offering reminders and screening appointments.^{2,3,6} Interpreter services should be promoted for patients who are not proficient in English; however, in some instances, this can slow down clinic visits and cause time constraints for clinicians.⁶ Using family members as interpreters is not always ideal because they may alter the information provided by the clinician.² Patients with limited English proficiency also may benefit from having an interpreter available, even if they feel one is not needed.

A study found that foreign-born women were twice as likely to have never received a Pap test compared with women born in the United States.¹¹ Researchers found the following rates of women who were unscreened for cervical cancer: Mexico (9.8%), South America (12.6%), Caribbean (14.6%), Southeast Asia (13.7%), Central Asia (20.4%), South Asia (22.9%), Middle East (25%), Africa (27.8%), Europe (16.4%), and the former Soviet Union (28.2%).¹¹ Foreign-born women who spent less than 25% of their life in the United States had a higher prevalence of being unscreened for cervical cancer.¹¹ The longer a woman lives in the United States, the more likely she is to have had preventive screening.¹¹ Among foreign-born women, barriers to cervical cancer screening that are unique to the United States include lack of knowledge on screening, lack of access to healthcare, lack of insurance coverage, high cost of care, lack of interpreter services, inability to travel for screening, clinician sex, insensitivity to addressing patient's cultural or religious practices, and the patient's immigration status.⁵ Personal barriers include women not knowing the signs and symptoms of cervical cancer, such as pain or discomfort.⁵ Patients who have health insurance have increased chances of getting a preventive screening.⁵

Clinicians can facilitate more cervical cancer screenings among immigrant women by seeing patients at regularly scheduled appointments, providing healthcare recommendations and necessary referrals for screening, educating patients about the risk of cancer and preventive measures they can take, and providing information on preventive screenings. It also is helpful if the clinician is fluent in the patient's language.⁵ Other factors that increase screening rates include patients having the financial means to pay for screening, increased time living in the United States, English language proficiency, higher education, services to improve transportation to the clinic, and familial and community support.⁵ Educational programs in a number of cultures have been found to be beneficial at providing patients with knowledge of cervical cancer risks, prevention, and screening, resulting in improved scheduling and screening.⁵ Patients were more likely to get cervical cancer screening if they knew where to get a Pap smear completed.¹⁷ By developing programs that target multiple preventive screenings such as breast and colon, clinicians can effectively increase screenings.¹⁸

SCREENING BARRIERS BY REGION

Immigrant populations vary by region of origin. Therefore, clinicians must understand the issues unique to each region in order to increase cervical cancer screening rates.

Africa (Somalia) One of the largest refugee populations globally and the largest refugee population in North America is from Somalia in Africa.¹⁷ Somali women have been found to have lower cervical cancer screening rates compared with non-Somali women in the United States.¹⁷ Barriers to screening include lack of knowledge of cancer and its prevention, lack of access to healthcare, low health literacy, lack of educational materials, female circumcision, clinician's sex, and perceived clinician lack of understanding of Somali cultural beliefs.¹⁷ Racial discordance among clinicians and patients was not considered a barrier to screening.¹⁹ Somali patients may not understand the concept of prevention versus treatment in medicine.¹⁷ Most immigrants from Somalia are Muslim, and in this culture women prefer female clinicians and interpreters during a pelvic examination.^{17,19} Somali patients who saw female clinicians were more likely to complete cervical cancer screening.¹⁷ Female clinicians impart a higher level of comfort when performing Pap smears, spend more time in each patient appointment, and are more likely to give health behavior counseling and inquire about preventive measures than their male counterparts.¹⁷

Female circumcision is prevalent in this population and can cause difficulties with a routine pelvic examination and increase patients' fear of the examination.¹⁷ Many Somali immigrants have difficulty accessing Western healthcare systems and describe a feeling of isolation when trying to navigate the healthcare system and get appropriate care.¹⁷ Morrison and colleagues found that increased visits for primary care, emergency care, and obstetrician/gynecologist visits were a positive predictor for cervical cancer screening in the Somali immigrant population.^{17,20} Additionally, they found that cervical cancer screening positively correlated with higher duration of established care and older patient age.¹⁷ Exposure to more primary care providers also increased the likelihood of cervical cancer screening.¹⁷ Other interventions to improve cervical cancer screening among Somali women include health literacy; familiarizing them with their primary care clinic; discussing preventive health services in addition to cervical cancer screening; clinician acknowledgment of cultural, linguistic, and socioeconomic barriers; and patient and clinician being of the same sex.¹⁷

Asia Asian-American/Pacific Islander (AAPI) immigrant women were screened for cervical cancer significantly less often compared with women of AAPI descent born in the United States.^{3,21} Socioeconomic factors such as education and income were not significant in screening rates.³ Additionally, in the AAPI immigrant population, access to healthcare was not considered a factor in the low screen-

ing rates.³ Cervical cancer screening rates increased if female clinicians treated AAPI women.³ Limited English proficiency and lack of access to culturally competent healthcare providers also may influence screening rates for AAPI women.³

Korean immigrant women may avoid Pap smears because of embarrassment on exposing their genitals to the clinician, especially a male clinician.²¹ Barriers to cervical cancer screening for Korean immigrant women include a low perceived risk of cancer, not understanding the benefits of screening, only seeking out healthcare when they are ill, cost of screening, lack of insurance, and low English language proficiency.²¹ Women with limited English proficiency have difficulties navigating the healthcare system because of an inability to schedule appointments and communicate with healthcare providers.²¹ Cervical cancer screening rates in Korean immigrant women were low at 68.2% because they did not know where to obtain a Pap smear, and they were uncomfortable with a stranger performing the examination.²¹ Cervical cancer education has significantly improved screening rates in Korean women from 12% to 83%.²¹ Vietnamese women surveyed on barriers to cervical cancer screening most often cited pain with examinations conducted by male physicians.^{20,22}

Central and South America Foreign-born Hispanic women also have lower cervical cancer screening rates than their US-born Hispanic counterparts.³ Rates of cancer are lower among Hispanic populations compared with non-Hispanic Whites.¹⁸ However, survival rates for cancer among the Hispanic population are lower than in non-Hispanic Whites.^{18,23} Access to healthcare is a significant barrier to cervical cancer screening among Hispanic immigrants.³ Socioeconomic factors such as education and income were not important factors in screening rates.³ Increasing access to health insurance, identifying a primary care provider, and educating patients on the importance of annual well visits can increase cervical cancer screening rates.³ Educational programs through churches, culturally responsive communication, social support, and networking can improve screening rates among Hispanic immigrants: 90% of Latinos are members of a religious group, making faith-based groups a community resource target in this population.¹⁸ Interestingly, in the United States, only 10% of congregations sponsor health-related programs because of a lack of organizational capacity, skills, and resources.¹⁸

CONCLUSION

Clinicians must consider immigrant women's region of origin and how long they have lived in the United States because these factors affect the rate of cervical cancer screening. Patient education and ensuring adequate access to female clinicians may improve screening rates. Clinicians must be aware of cultural barriers and


should reach out to community resources to alleviate these barriers. **JAAPA**

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REFERENCES

1. Ryan C. Language use in the United States: 2011. *American Community Survey Reports*. 2013. <https://www2.census.gov/library/publications/2013/acs/acs-22/acs-22.pdf>. Accessed December 20, 2021.
2. Ridgeway JL, Njeru JW, Breitkopf CR, et al. Closing the gap: participatory formative evaluation to reduce cancer screening disparities among patients with limited English proficiency. *J Cancer Educ*. 2021;36(4):795-803.
3. Goel MS, Wee CC, McCarthy EP, et al. Racial and ethnic disparities in cancer screening: the importance of foreign birth as a barrier to care. *J Gen Intern Med*. 2003;18(12):1028-1035.
4. Dunn SF, Lofters AK, Ginsburg OM, et al. Cervical and breast cancer screening after CARES: a community program for immigrant and marginalized women. *Am J Prev Med*. 2017;52(5):589-597.
5. Adunlin G, Cyrus JW, Asare M, Sabik LM. Barriers and facilitators to breast and cervical cancer screening among immigrants in the United States. *J Immigr Minor Health*. 2019;21(3):606-658.
6. Bruce KH, Schwei RJ, Park LS, Jacobs EA. Barriers and facilitators to preventive cancer screening in Limited English Proficient (LEP) patients: physicians' perspectives. *Commun Med*. 2014;11(3):235-247.
7. Tan SY, Tatsumura Y. George Papanicolaou (1883-1962): discoverer of the Pap smear. *Singapore Med J*. 2015;56(10):586-587.
8. Centers for Disease Control and Prevention. Cervical cancer factsheet. Inside knowledge campaign. www.cdc.gov/cancer/cervical/pdf/cervical_facts.pdf. Accessed December 16, 2021.
9. World Health Organization. Cancer Today. <https://gco.iarc.fr/today/fact-sheets-cancers>. Accessed December 16, 2021.
10. World Health Organization. Cancer. www.who.int/news-room/fact-sheets/detail/cancer. Accessed November 16, 2021.
11. Endeshaw M, Clarke T, Senkomago V, Saraiya M. Cervical cancer screening among women by birthplace and percent of lifetime living in the United States. *J Low Genit Tract Dis*. 2018;22(4):280-287.
12. Benard VB, Jackson JE, Greek A, et al. A population study of screening history and diagnostic outcomes of women with invasive cervical cancer. *Cancer Med*. 2021;10(12):4127-4137.
13. US Preventive Services Task Force. Final update summary: cervical cancer: screening. www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/cervical-cancer-screening. Accessed November 16, 2021.
14. Healthy People 2030. Increase the proportion of females who get screened for cervical cancer—C-09. <https://health.gov/healthypeople/objectives-and-data/browse-objectives/cancer/increase-proportion-females-who-get-screened-cervical-cancer-c-09>. Accessed December 20, 2021.
15. National Cancer Institute. Cervical cancer. www.cancer.gov/types/cervical/hp. Accessed November 16, 2021.
16. Jacobs EA, Karavolos K, Rathouz PJ, et al. Limited English proficiency and breast and cervical cancer screening in a multiethnic population. *Am J Public Health*. 2005;95(8):1410-1416.

17. Morrison TB, Flynn PM, Weaver AL, Wieland ML. Cervical cancer screening adherence among Somali immigrants and refugees to the United States. *Health Care Women Int.* 2013;34(11):980-988.
18. Allen JD, Pérez JE, Tom L, et al. A pilot test of a church-based intervention to promote multiple cancer-screening behaviors among Latinas. *J Cancer Educ.* 2014;29(1):136-143.
19. Odunukan OW, Abdulai RM, Hagi Salaad MF, et al. Provider and interpreter preferences among Somali women in a primary care setting. *J Prim Care Community Health.* 2015;6(2):105-110.
20. Morrison TB, Wieland ML, Cha SS, et al. Disparities in preventive health services among Somali immigrants and refugees. *J Immigr Minor Health.* 2012;14(6):968-974.
21. Fang CY, Ma GX, Tan Y, Chi N. A multifaceted intervention to increase cervical cancer screening among underserved Korean women. *Cancer Epidemiol Biomarkers Prev.* 2007;16(6):1298-1302.
22. Samuel PS, Pringle JP, James NW 4th, et al. Breast, cervical, and colorectal cancer screening rates amongst female Cambodian, Somali, and Vietnamese immigrants in the USA. *Int J Equity Health.* 2009;8:30.
23. American Cancer Society. Cancer facts & figures for Hispanic and Latino people 2018-2020. www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/cancer-facts-and-figures-for-hispanics-and-latinos/cancer-facts-and-figures-for-hispanics-and-latinos-2018-2020.pdf. Accessed December 16, 2021.



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